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CURRENT INDUSTRIAL REPORTS

Manufacturers' Shipments, Inventories, and Orders

February 1976



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Manufacturers new orders increased 2.5 percent in February to an all time high of \$90,371 million in seasonally adjusted current dollars, the Bureau of the Census, Department of Commerce reported today. This increase of \$2,181 million was largely due to an increase of \$1,144 million reported by the transportation industries with motor vehicles industries and the shipbuilding and railroad equipment industries reporting the largest part of the advance. New orders for durable goods increased in February by 4.2 percent or \$1,811 million. This is an upward revision from the \$1,032 million increase shown in the advance report for February which was issued earlier this month based on lower survey response.

Shipments by all manufacturers increased by \$1,683 million (1.9 percent) to a total of \$90,959 million. Durable goods increased by \$1,117 million (2.5 percent) with about two-thirds of the increase being shown by the motor vehicles and aircraft industries. The non-durable goods industries reported a shipments increase of \$566 million (1.3 percent) with moderate increases in most areas being partially offset by a \$248 million decline in shipments by the food industries.

Total sales for February continue to exceed all previous figures for sales in a single month on a current dollar basis. Since sales also continue to exceed new orders received, the backlog of unfilled orders declined by \$590 million, continuing the basic pattern of the last 17 months. The electrical machinery, shipbuilding and railroad equipment industries were among the few industries that showed increases in their order backlog.

New orders of capital goods industries increased 6.8 percent to \$12,652 million. This is the largest

percentage increase in this series since October, 1973. The dollar increase was divided between defense (increasing \$353 million or 23.6 percent) and non-defense (increasing \$451 million or 4.4 percent). The figures for capital goods industries have been significantly affected by revisions from the advance report for February. These revisions are due to more complete reporting as well as changes made by individual companies to the figures which were submitted earlier for the advance report.

Total manufacturing inventories showed a small increase of \$174 million or 0.3 percent to \$147,204 million. The increase is entirely in the inventories held by the non-durable goods manufacturers which increased by \$171 million or 0.3 percent to \$51,537 million. Inventories held by durable goods manufacturers were essentially unchanged at \$95,667 million.

SCHEDULED RELEASE DATES

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for March is scheduled for release on April 21, 1976 and the full report is schedule for release on April 20, 1976.

This report contains data on an unadjusted and seasonally adjusted basis. However, the data are not adjusted for price changes. For an explanation of terms used in this report see appendix following table 5.



U.S. DEPARTMENT OF COMMERCE Bureau of the Census

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233. For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233 or any Department of Commerce District Office. Price: 15 cents per copy, \$1.50 per year.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Shipments						Total inventories					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Feb. 1976 ^p	Jan. 1976 ^r	Dec. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Feb. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Dec. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Feb. 1975
All manufacturing industries:												
Total.....	90,959	89,276	87,616	91,874	83,362	80,210	147,204	147,030	146,574	147,969	147,458	152,692
Total, excluding transportation.....	79,883	79,008	77,320	80,503	73,667	71,650	125,865	125,917	125,403	126,505	126,215	131,164
Durable goods industries, total.	45,687	44,570	43,681	46,111	41,265	40,574	95,667	95,664	95,754	96,011	95,625	100,403
Stone, clay, and glass products.	2,374	2,329	2,223	2,191	2,016	1,913	3,580	3,632	3,630	3,664	3,631	3,829
Primary metals, total.....	6,749	6,775	6,409	6,877	6,554	7,133	13,926	13,903	13,924	14,082	14,145	13,157
Blast furnaces, steel mills.	3,525	3,590	3,343	3,578	3,529	3,902	7,738	7,718	7,627	7,855	7,934	6,719
Nonferrous metals.....	2,058	2,058	2,068	2,111	1,957	2,056	4,673	4,636	4,696	4,710	4,678	4,625
All other primary metals....	1,166	1,127	998	1,188	1,068	1,175	1,515	1,549	1,601	1,517	1,533	1,813
Fabricated metal products total.....	5,735	5,621	5,396	5,663	5,106	4,830	10,924	11,011	10,979	10,809	10,840	11,915
Metal cans, barrels, and drums.....	666	568	549	607	498	513	903	872	772	886	862	1,180
Machinery, except electrical, total.....	7,662	7,654	7,730	7,994	7,162	7,758	20,865	20,976	20,988	21,057	20,990	22,381
Engines and turbines.....	692	621	635	665	542	527	1,764	1,778	1,753	1,793	1,766	1,983
Farm machinery and equipment.	781	854	792	845	788	859	1,845	1,845	1,859	1,919	1,874	2,155
Construction, mining, and material handling equipment.	1,548	1,546	1,725	1,683	1,522	1,729	4,912	4,912	4,868	4,961	4,951	4,734
Metalworking machinery.....	504	516	545	526	482	565	1,661	1,717	1,739	1,666	1,705	1,891
General industrial machinery	865	865	793	884	772	756	1,968	2,014	1,983	1,984	1,998	1,988
Electrical machinery, total...	5,875	5,813	5,434	5,924	5,298	5,241	13,106	13,168	13,196	12,953	12,949	14,581
Electrical transmission and distribution equipment and industrial apparatus.....	1,239	1,231	1,088	1,279	1,071	1,175	2,835	2,837	2,835	2,836	2,825	3,259
Household appliances.....	926	887	858	902	743	661	1,085	1,088	1,108	1,096	1,092	1,323
Radio and TV.....	457	488	460	437	447	360	1,013	1,088	1,057	937	995	1,126
Communication equipment.....	1,291	1,197	1,089	1,261	1,130	1,259	4,087	4,071	4,116	4,067	4,030	4,252
Transportation equipment, total	11,076	10,268	10,296	11,371	9,695	8,560	21,339	21,113	21,171	21,464	21,243	21,528
Motor vehicles and parts....	7,692	7,071	7,262	7,974	6,957	5,344	6,071	5,987	5,917	6,198	6,119	6,563
Aircraft, missiles, and parts.....	2,248	2,005	1,955	2,268	1,758	2,289	12,096	11,938	11,934	12,103	11,941	11,360
Shipbuilding and railroad equipment.....	586	653	576	622	578	540	2,535	2,547	2,649	2,492	2,519	2,741
Instruments and related products, total.....	1,529	1,585	1,580	1,484	1,425	1,290	3,787	3,850	3,830	3,755	3,779	4,187
Scientific and engineering..	790	825	847	799	779	721	1,949	1,962	1,941	1,935	1,945	2,095
All other instruments and related products.....	739	760	733	685	646	569	1,838	1,888	1,889	1,820	1,834	2,092
All other durable goods industries.....	4,687	4,525	4,613	4,607	4,009	3,849	8,140	8,011	8,036	8,227	8,048	8,825
Nondurable goods industries, total.....	45,272	44,706	43,935	45,763	42,097	39,636	51,537	51,366	50,820	51,958	51,833	52,289
Food and kindred products, total.....	14,349	14,597	14,007	14,292	13,726	13,629	11,693	11,858	11,738	11,832	12,152	12,071
Meat products.....	3,035	3,196	3,196	2,969	3,145	2,643	1,237	1,224	1,228	1,269	1,232	1,211
Fats and oils.....	1,165	1,215	1,269	1,233	1,164	1,391	924	972	997	988	1,047	1,005
Tobacco products.....	634	652	667	603	615	586	3,373	3,244	3,255	3,569	3,455	3,275
Textile mill products.....	3,266	3,228	3,122	3,239	2,971	2,287	4,712	4,681	4,589	4,737	4,605	4,567
Paper and allied products, total.....	3,892	3,729	3,686	3,969	3,602	3,293	4,684	4,684	4,552	4,662	4,657	4,855
Pulp, paper, etc.....	1,803	1,758	1,760	1,825	1,713	1,443	1,789	1,807	1,754	1,790	1,794	1,777
Paperboard containers.....	887	843	810	881	800	809	1,237	1,229	1,201	1,226	1,210	1,315
All other paper containers..	1,202	1,128	1,116	1,263	1,089	1,041	1,658	1,648	1,597	1,646	1,653	1,763
Chemicals and allied products, total.....	8,040	7,931	8,016	8,223	7,385	7,019	10,984	11,037	10,861	11,176	11,125	11,040
Industrial chemicals, except pigments.....	2,642	2,664	2,636	2,735	2,542	2,245	3,011	3,038	3,033	3,062	3,087	3,041
Drugs, soap, and toiletries.	2,136	2,068	2,066	2,219	2,010	1,948	3,633	3,741	3,621	3,637	3,703	3,808
Petroleum and coal products...	6,024	5,818	5,784	6,187	5,839	4,985	4,445	4,321	4,313	4,368	4,341	4,138
Rubber and plastics products, n.e.c.....	2,189	2,084	2,021	2,215	1,932	1,923	3,042	3,053	2,989	3,086	3,065	3,274
All other nondurable goods industries.....	6,878	6,667	6,632	7,035	6,027	5,914	8,604	8,488	8,523	8,528	8,433	9,069

See footnotes at end of table.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP--Continued

Millions of dollars

Industry group	New orders						Unfilled orders					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Feb. 1976 ^P	Jan. 1976 ^R	Dec. 1975	Feb. 1976 ^P	Jan. 1976 ^R	Feb. 1975	Feb. 1976 ^P	Jan. 1976 ^R	Dec. 1975	Feb. 1976 ^P	Jan. 1976 ^R	Feb. 1975
All manufacturing industries:												
Total.....	90,371	88,190	86,754	92,177	83,037	78,446	118,986	119,576	120,659	119,724	119,417	132,289
Total, excluding transportation.....	79,606	78,569	76,277	81,016	73,519	69,859	88,098	88,375	88,811	88,568	88,051	98,358
Durable goods industries, total.	45,095	43,284	42,837	46,259	40,724	38,813	113,614	114,209	115,494	114,308	114,158	128,581
Primary metals, total.....	6,604	6,615	6,657	7,275	6,353	6,436	13,775	13,920	14,084	14,135	13,737	18,640
Blast furnaces, steel mills.	3,389	3,770	3,695	3,827	3,501	3,521	9,326	9,463	9,287	9,475	9,226	12,305
Nonferrous metals.....	2,097	1,949	2,068	2,290	1,967	1,911	2,560	2,521	2,629	2,737	2,559	3,081
Fabricated metal products.....	5,517	5,405	5,163	5,416	4,969	4,685	17,251	17,470	17,686	17,177	17,424	19,187
Machinery, except electrical, total.....	7,444	7,363	7,118	7,854	7,128	7,219	24,536	24,755	25,044	24,691	24,830	28,598
Engines and turbines.....	718	633	548	671	597	478	6,743	6,717	6,706	6,740	6,733	7,024
Construction, mining, and material handling equipment.	1,341	1,435	1,549	1,501	1,447	1,453	5,557	5,764	5,875	5,513	5,695	7,070
Metalworking machinery.....	490	504	495	506	461	464	1,590	1,605	1,616	1,579	1,600	2,347
General industrial machinery.	775	728	730	862	672	810	3,305	3,396	3,533	3,409	3,430	3,426
Electrical machinery, total...	6,101	5,860	4,941	6,049	5,209	4,875	18,839	18,612	18,564	18,769	18,645	20,038
Electrical transmission and distribution equipment and industrial apparatus.....	1,186	1,166	978	1,264	960	981	5,408	5,461	5,526	5,401	5,416	6,237
Household appliances.....	916	916	859	901	771	682	132	142	113	134	136	116
Radio and TV.....	447	494	424	438	437	362	471	480	473	444	443	410
Communication equipment.....	1,344	1,368	821	1,221	1,237	1,278	7,142	7,090	6,918	7,180	7,220	7,212
Transportation equipment, total.....	10,765	9,621	10,477	11,161	9,518	8,587	30,888	31,201	31,848	31,156	31,366	33,931
Aircraft, missiles, and parts.....	1,778	1,619	2,105	1,786	1,661	2,672	19,782	20,253	20,639	19,821	20,303	21,486
Shipbuilding and railroad equipment.....	731	174	477	872	265	296	7,830	7,685	8,165	7,966	7,716	8,600
All other durable goods industries.....	8,664	8,420	8,481	8,504	7,547	7,007	8,325	8,251	8,268	8,380	8,156	8,187
Nondurable goods industries, total.....	45,276	44,906	43,917	45,918	42,313	39,633	5,416	5,367	5,165	5,372	5,259	3,708
Industries with unfilled orders.....	10,678	10,597	10,138	10,891	9,999	8,793	5,416	5,367	5,165	5,372	5,259	3,708
Industries without unfilled orders.....	34,598	34,309	33,779	35,027	32,314	30,840	-	-	-	-	-	-

- Represents zero. ^PPreliminary. ^RRevised.
¹Adjusted for trading-day and calendar-month variations.

Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	Feb. 1976 ^p	Jan. 1976 ^r	Dec. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Feb. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Dec. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Feb. 1975
	Shipments						Total inventories					
All manufacturing industries, total..	90,959	89,276	87,616	91,874	83,362	80,210	147,204	147,030	146,574	147,969	147,458	152,692
Durable goods industries, total.....	45,687	44,570	43,681	46,111	41,265	40,574	95,667	95,664	95,754	96,011	95,625	100,403
Nondurable goods industries, total.....	45,272	44,706	43,935	45,763	42,097	39,636	51,537	51,366	50,820	51,958	51,833	52,289
Industry groups arranged by market categories:												
Home goods and apparel.....	8,379	8,251	8,135	8,510	7,296	6,649	12,780	12,710	12,835	12,714	12,524	14,005
Consumer staples.....	17,742	17,831	17,177	17,650	16,809	16,323	19,387	19,466	19,264	19,670	19,868	19,927
Equipment and defense products, except automotive.....	11,693	11,513	11,392	11,977	10,584	11,671	37,783	37,711	37,861	37,944	37,684	39,259
Automotive equipment.....	8,940	8,262	8,406	9,153	7,948	6,291	7,571	7,495	7,436	7,765	7,660	8,391
Construction materials, supplies, and intermediate products.....	7,028	6,849	6,777	6,573	5,814	5,393	12,585	12,704	12,639	12,692	12,647	13,096
Other materials and supplies and intermediate products.....	37,177	36,570	35,729	38,011	34,911	33,883	57,098	56,944	56,539	57,184	57,075	58,014
Supplementary series: ²												
Household durable goods industries.....	3,636	3,602	3,526	3,631	3,195	2,895	6,194	6,212	6,430	6,157	6,110	7,269
Capital goods industries.....	13,143	12,811	12,594	13,483	11,739	13,085	42,411	42,310	42,462	42,442	42,171	43,847
Nondefense.....	11,255	10,959	10,933	11,657	10,103	11,392	34,496	34,668	34,656	34,545	34,546	37,153
Defense.....	1,888	1,852	1,661	1,826	1,636	1,693	7,915	7,642	7,806	7,897	7,625	6,694
	New orders						Unfilled orders					
All manufacturing industries, total..	90,371	88,190	86,754	92,177	83,037	78,446	118,986	119,576	120,659	119,724	119,417	132,289
Durable goods industries, total.....	45,095	43,284	42,837	46,259	40,724	38,813	113,614	114,209	115,494	114,308	114,158	128,581
Nondurable goods industries, total.....	45,276	44,906	43,917	45,918	42,313	39,633	5,372	5,367	5,165	5,416	5,259	3,708
Industry groups arranged by market categories:												
Home goods and apparel.....	8,303	8,249	8,108	8,487	7,294	6,644	2,330	2,421	2,384	2,303	2,333	2,107
Consumer staples.....	17,727	17,866	17,187	17,643	16,845	16,319						
Equipment and defense products, except automotive.....	11,441	10,688	10,733	11,809	10,296	10,785	59,589	59,831	60,437	60,029	60,173	64,527
Automotive equipment.....	8,954	8,480	8,536	9,175	8,181	6,179						
Construction materials, supplies, and intermediate products.....	6,885	6,755	6,822	6,440	5,801	5,201	15,874	16,016	16,110	15,723	15,856	17,298
Other materials and supplies and intermediate products.....	37,061	36,152	35,368	38,623	34,620	33,318	41,193	41,308	41,728	41,669	41,055	48,357
Supplementary series: ²												
Household durable goods industries.....	3,585	3,588	3,492	3,636	3,179	2,884	1,669	1,720	1,731	1,646	1,642	1,552
Capital goods industries.....	12,652	11,848	11,657	13,121	11,373	12,489	66,971	67,465	68,427	67,356	67,717	73,881
Nondefense.....	10,802	10,351	10,156	11,343	9,929	10,511	41,961	42,415	43,024	42,104	42,417	48,751
Defense.....	1,850	1,497	1,501	1,778	1,444	1,978	25,010	25,050	25,403	25,252	25,300	25,130

¹-During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in these new defense series. Since there are no historic data available to develop separate seasonal factors for these reporters, the data have been seasonally adjusted using the factors of these industries. ^pPreliminary. ^rRevised. ²Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. ³The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.
 Capital goods industries - The capital goods industries series is comparable to the previous Producers' Capital Goods and the Defense Products (old series) categories.
 Nondefense industries - Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft, aircraft parts, and ordnance.
 Defense products - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, complete aircraft, aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1970-1975	
	Jan.- Feb. 1976 ^p	Dec. 1975- Jan. 1976	Nov.- Dec. 1975	3 months			12 months Feb. 1975- Feb. 1976	Average rise	Average decline
				Nov. 1975- Feb. 1976	Aug.- Nov. 1975	May- Aug. 1976			
Shipments:									
All manufacturing industries.....	+1.9	+1.9	+1.3	+1.7	+0.5	+2.2	+1.2	+1.4	-1.6
Durable goods industries, total.....	+2.5	+2.0	+3.1	+2.5	-0.0	+1.6	+1.1	+1.5	-2.2
Nondurable goods industries, total.....	+1.3	+1.8	-0.5	+0.9	+1.1	+2.9	+1.2	+1.5	-1.2
Total inventories:									
All manufacturing industries.....	+0.1	+0.3	-0.1	+0.1	-0.0	-0.5	-0.3	+0.9	-0.3
New orders:									
All manufacturing industries.....	+2.5	+1.7	+0.5	+1.6	+0.5	+2.6	+1.4	+1.8	-1.9
Durable goods industries, total.....	+4.2	+1.0	+2.0	+2.4	-0.2	+2.2	+1.6	+2.4	-2.7
Nondurable goods industries, total.....	+0.8	+2.3	-1.0	+0.7	+1.1	+3.0	+1.3	+1.5	-1.3
Unfilled orders:									
Durable goods industries, total.....	-0.5	-1.1	-0.7	-0.8	-0.7	-0.4	-1.0	+1.7	-1.2

Table 4.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	Feb. 1976 ^p	Jan. 1976 ^r	Dec. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Feb. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Dec. 1975	Feb. 1976 ^p	Jan. 1976 ^r	Feb. 1975
	Total						Materials and supplies					
All manufacturing industries, total..	147,204	147,030	146,574	147,969	147,458	152,692	51,147	51,068	50,467	51,127	51,404	54,914
Durable goods industries, total.....	95,667	95,664	95,754	96,011	95,625	100,403	31,159	31,176	30,796	30,863	31,181	34,229
Stone, clay, and glass products.....	3,580	3,632	3,630	3,664	3,631	3,829	1,368	1,333	1,337	1,372	1,330	1,477
Primary metals.....	13,926	13,903	13,924	14,082	14,145	13,157	6,443	6,384	6,237	6,373	6,510	6,126
Machinery (electrical and nonelectrical)	33,971	34,144	34,184	34,010	33,939	36,962	10,089	10,200	10,161	10,059	10,157	11,527
Transportation equipment.....	21,339	21,113	21,171	21,464	21,243	21,528	4,567	4,484	4,490	4,554	4,512	4,907
All other durable goods industries.....	22,851	22,872	22,845	22,791	22,667	24,927	8,692	8,775	8,571	8,505	8,672	10,192
Nondurable goods industries, total.....	51,537	51,366	50,820	51,958	51,833	52,289	19,988	19,892	19,671	20,264	20,223	20,685
Chemicals and allied products.....	10,984	11,037	10,861	11,176	11,125	11,040	4,282	4,327	4,323	4,301	4,360	4,534
Petroleum and coal products.....	4,445	4,321	4,313	4,368	4,341	4,138	1,186	1,148	1,099	1,183	1,166	1,105
Rubber and plastics products, n.e.c.....	3,042	3,053	2,989	3,086	3,065	3,274	1,051	1,064	1,056	1,037	1,051	1,142
All other nondurable goods industries....	33,066	32,955	32,657	33,328	33,302	33,837	13,469	13,353	13,193	13,743	13,646	13,904
	Work in process						Finished goods					
All manufacturing industries, total..	48,617	48,609	48,782	48,835	48,618	49,529	47,440	47,353	47,325	48,007	47,436	48,249
Durable goods industries, total.....	40,698	40,779	41,031	40,921	40,792	41,867	23,810	23,709	23,927	24,227	23,652	24,307
Stone, clay, and glass products.....	509	504	487	521	505	511	1,703	1,795	1,806	1,771	1,796	1,841
Primary metals.....	4,273	4,278	4,330	4,380	4,368	3,890	3,210	3,241	3,357	3,329	3,267	3,141
Machinery (electrical and nonelectrical)	14,416	14,572	14,657	14,454	14,518	15,807	9,466	9,372	9,366	9,497	9,264	9,628
Transportation equipment.....	14,863	14,695	14,742	14,921	14,756	14,661	1,909	1,934	1,939	1,989	1,975	1,960
All other durable goods industries.....	6,637	6,730	6,815	6,645	6,645	6,998	7,522	7,367	7,459	7,641	7,350	7,737
Nondurable goods industries, total.....	7,919	7,830	7,751	7,914	7,826	7,662	23,630	23,644	23,398	23,780	23,784	23,942
Chemicals and allied products.....	1,736	1,782	1,742	1,759	1,775	1,697	4,966	4,928	4,796	5,116	4,990	4,809
Petroleum and coal products.....	1,199	1,151	1,165	1,172	1,134	1,051	2,060	2,022	2,049	2,013	2,041	1,982
Rubber and plastics products, n.e.c.....	511	502	476	511	503	544	1,480	1,487	1,457	1,538	1,511	1,588
All other nondurable goods industries....	4,473	4,395	4,368	4,472	4,414	4,370	15,124	15,207	15,096	15,113	15,242	15,563

^pPreliminary.^rRevised.

Table 5.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

Based on seasonally adjusted data

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio ¹ months' backlog			
	Feb. 1976 ^P	Jan. 1976 ^P	Dec. 1975	Feb. 1975	Feb. 1976 ^P	Jan. 1976 ^P	Dec. 1975	Feb. 1975
All manufacturing industries, total.....	1.62	1.65	1.67	1.92	2.38	2.44	2.52	2.94
Durable goods industries, total.....	2.09	2.15	2.19	2.49	2.89	2.95	3.07	3.55
Stone, clay, and glass products.....	1.51	1.56	1.63	1.81	(NA)	(NA)	(NA)	(NA)
Primary metals.....	2.06	2.05	2.17	1.86	2.04	2.05	2.20	2.59
Fabricated metals.....	1.90	1.96	2.03	2.46	3.40	3.46	3.65	4.44
Machinery, except electrical.....	2.72	2.74	2.72	2.99	3.20	3.23	3.24	3.84
Electrical machinery.....	2.23	2.27	2.43	2.84	3.21	3.20	3.42	3.87
Transportation equipment.....	1.93	2.06	2.06	2.68	5.50	5.94	6.24	6.84
Instruments and related products.....	2.48	2.43	2.42	3.18	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.14	1.15	1.16	1.32	0.50	0.52	0.51	0.42
Food and kindred products.....	0.81	0.81	0.84	0.87	(X)	(X)	(X)	(X)
Tobacco products.....	5.32	4.98	4.88	5.02	(X)	(X)	(X)	(X)
Textile mill products.....	1.44	1.45	1.47	1.97	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.20	1.26	1.23	1.51	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.37	1.39	1.35	1.58	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.74	0.74	0.75	0.87	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.39	1.46	1.48	1.70	(X)	(X)	(X)	(X)

NA Not available. P Preliminary. R Revised. X Not applicable.

¹Excludes the following industries with no unfilled order: Wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the Annual Survey of Manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments—Shipments in the monthly survey are equivalent to value of shipments as reported

in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories—End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if

feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders—Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They

also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.